REMARKS

Reconsideration of this application and the rejection of claims 1-3 and 5-17 are respectfully requested. Applicants have attempted to address every objection and ground for rejection in the Office Action dated November 9, 2009 (Paper No. 20091104) and believe the application is now in condition for allowance. The claims have been amended to more clearly describe the present invention.

Claims 1, 3, 5-12 and 17 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,255,826 to Ranalletta et al. Applicants disagree with and traverse this rejection for the following reasons.

Ranalletta discloses a liquid dispenser having a nozzle assembly including an adapter 18 that is positioned in the neck 16 of the bottle, an elastic diaphragm 24 that is positioned on the adapter and a nozzle housing 20 that encloses the diaphragm and the adapter. As shown in Fig. 2 of Ranalletta, the adapter 18 includes an upwardly extending nipple 18j that is within the tubular portion 24d of the diaphragm. The tubular portion 24d of the diaphragm does not contact the nipple 18j of the adapter which allows fluid to flow through the tubular portion 24d and out of the container.

In contrast, amended claim 1 recites, among other things, a one-way valve for discharging a flowable material from a container that includes "an independent valve seat which is positioned in an opening defined by a neck of the container [having] . . . a projection having an end section," "an elastic seal which comprises an annular section seated on and

covering said at least one through hole, and a sleeve-like section which surrounds the projection at a radial distance with the exception of its end section" and "a non-removable cap configured to enclose said valve seat and said seal and defining an exit opening, wherein when the one-way valve is in a closed state, said annular section is seated on said at least one through hole . . . said end sections of said projection and said seal are positioned in said exit opening and are in engagement to seal said exit opening, and when the one-way valve is in an open state, said annular section moves away from said at least one through hole and said end section of said seal moves upwardly out of said exit opening to dis-engage said end section of said seal from said end section of said projection to allow the material to pass through said at least one through hole and be discharged from said exit opening." Ranalletta fails to disclose such subject matter.

As shown in Figs. 2 and 2A of Ranalletta, the tubular portion 24d does not contact the nipple 18j of the adapter. Specifically, there is a constant space that is formed between the nipple 18j and the tubular portion 24d that allows fluid from the container to flow past the nipple and out of the tubular portion. The nipple 18j and the tubular portion 24d are therefore not in engagement as recited in amended claim 1.

Furthermore, the end section of the tubular portion 24d and the end section of the nipple 18j are not positioned within the exit opening of the nozzle housing 20 as recited in amended claim 1. As a result, the exit opening of nozzle housing 20 is not sealed by the end sections of the tubular portion 24d and the nipple 18j, which allows some liquid to

remain in the tubular portion 24d after use, where that liquid can be exposed to contaminants in the air (Col. 4, lines 58-66). Ranalletta's dispensing configuration also exposes the solution inside the container to contaminants. In contrast, the end sections of the projection and the seal recited in amended claim 1 are positioned in the exit opening and are in engagement to seal the exit opening for preventing contaminants from entering the exit opening and the container.

Amended claim 1 also recites that the end section of the seal moves upwardly out of the exit opening to disengage the end section of the seal from the end section of the projection to allow material to pass through the at least one through hole to be discharged from the exit opening when the valve is in the open state. Since the tubular portion 24d and the nipple 18j in Ranalletta are always dis-engaged from each other, Ranalletta does not disclose such a feature.

Ranalletta also fails to disclose an elastic seal that is seated on at least one through hole defined by the independent valve seat when the elastic seal moves away from the at least one through hole in the open state. Instead, Ranalletta includes a diaphragm 24 that is spaced above the bores 28 and 30 defined by the adapter 18 (see Fig. 2). The diaphragm 24 therefore is not seated on these openings for purposes of completely sealing the openings to further prevent contaminants from entering the inside of the container.

Additionally, neither the end of the tubular portion 24d nor the end of the nipple 18j is positioned in the exit opening of the nozzle housing 20. As shown in Fig. 2, the

end of the tubular portion 24d is positioned above the exit opening of the nozzle housing whereas the end of the nipple 18j is positioned significantly below that exit opening. Ranalletta therefore fails to disclose end sections on the projection and the seal that are positioned in the exit opening as recited in amended claim 1.

Ranalletta also fails to disclose the subject matter of claim 12 which states that the "upper edge of the sleeve-like section of the seal is in alignment with the upper side of the cap in the closed state of the valve." As stated above, the ends of the nipple 18j and the tubular portion 24d are not in alignment with each other.

For at least these reasons, Applicants submit that amended claim 1, and the claims that depend therefrom, are each patentably distinguished over Ranalletta and in condition for allowance.

Amended claim 17 includes similar subject matter to amended claim 1. Specifically, amended claim 17 recites, among other things, a one-way valve for discharging a flowable material from a container where the valve includes a "non-removable cap seated on a neck of the container and defining an exit opening," "a valve seat which is positioned in an opening defined by the container neck" and "an elastic seal including an annular section seated on and covering said at least one through hole to prevent contaminants from entering the container through said at least one through hole and a sleeve-like section which surrounds the projection at a radial distance with the exception of its end section, which in the closed state of the one-way valve, is positioned in the exit opening and engaged with the end section

of the projection to seal the exit opening for preventing the flowable material from passing through said exit opening." As stated above, Ranalletta fails to disclose an elastic seal having a sleeve-like section with an end section that is positioned in the exit opening and engaged with an end section of a projection of a valve seat that seals the exit opening for preventing the flow of material from passing through the exit opening when the valve is in the closed state. Accordingly, Applicants submit that amended claim 17 is patentably distinguished over Ranalletta and is in condition for allowance.

Claims 2 and 13-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Ranalletta and U.S. Patent No. 2,628,004 to T.F. Schlicksupp. The Examiner states that Ranalletta discloses the subject matter of these claims except for a sterilization means arranged in the product flow path. In an apparent error in the Action, the Examiner then goes on to discuss a different reference, U.S. Patent No. 5,490,938 to Sawan et al., as disclosing this subject matter. Accordingly, Applicants will address both references.

Schlicksupp discloses a self-closing collapsible tube including a body portion 1 having a tapered wall 3 that defines a central opening 3'. The tube includes a plate 7 having an upper an upwardly extending post 6 that defines a pair of openings 8 that are on either side of the post. Sleeve-like member 4 is spaced from the plate 7 and includes an end portion that engages the end of the post 6. When the tube is squeezed or pressure is otherwise applied to the bottom of the tube, the material inside of the tube moves through the opening 8 and upwardly between the sleeve-like member 4 and the post 6.

As stated in Applicants' previous response, Schlicksupp fails to disclose an elastic seal and a "non-removable cap" that is configured to "enclose said valve seat and said seal." Furthermore, the ends of the sleeve-like member 4 and the post 6 do not rest in the exit opening of the tube when the tube is in the closed state or otherwise not being used. Instead, these ends protrude above the opening 3' during use and when the tube is not being used.

Sawan discloses a liquid dispenser for sterile solutions. The liquid dispenser in Sawan does not remedy the deficiencies of Ranalletta or Schlicksupp.

Accordingly, Applicants submit that claims 2 and 13-16, which depend from amended claim 1, are each patentably distinguished over the combination of Ranalletta and Schlicksupp, and Ranalletta and Sawan for the reasons provided above with respect to amended claim 1 and for the further reasons that the cited combinations fail to disclose or suggest the subject matter of claims 2 and 13-16 in combination with the subject matter of amended claim 1.

Applicants submit that in view of the above-identified amendments and remarks, the claims in their present form are patentably distinct over the art of record. Allowance of the rejected claims is respectfully requested. Should the Examiner discover there are remaining issues which may be resolved by a telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By /Christopher S. Hermanson/
Christopher S. Hermanson
Registration No. 48,244

Customer No. 24978
February 9, 2010
300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
Telephone: (312) 360-0080
Facsimile: (312) 360-9315